CRF __..ors Corrected by th STIC Syst __ Branch

1600 1653

RECEIVED
AUG 16 2002
TECH CENTER 1600/2900

Serial Numb r: 09/689,952

ENTERED

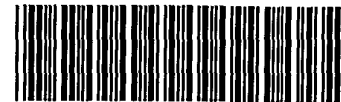CRF Processing Date: ___
Edited by: ___
Verified by: ___ (STIC staff)

- [ ] Changed a file from non-ASCII to ASCII

- [ ] Changed the margins in cases where the sequence text was "wrapped" down to the next line.

- [ ] Edited a format error in the Current Application Data section, specifically:
  _____

- [ ] Edited the Current Application Data section with the actual current number. The number inputted by the applicant was [ ] the prior application data; or [ ] other _____.

- [ ] Added the mandatory heading and subheadings for "Current Application Data".

- [ ] Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

- [ ] Changed the spelling of a mandatory field (the headings or subheadings), specifically:
  _____

- [ ] Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
  _____

- [ ] Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
  _____

- [ ] Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

- [ ] Inserted colons after headings/subheadings. Headings edited included:
  _____

- [ ] Deleted extra, invalid, headings used by an applicant, specifically:
  _____

- [x] Deleted: [x] non-ASCII "garbage" at the beginning/end of files; [ ] secretary initials/filename at end of file; [ ] page numbers throughout text; [ ] other invalid text, such as _____ .

- [ ] Inserted mandatory headings, specifically: _____

- [ ] Corrected an obvious error in the response, specifically:
  _____

- [ ] Edited identifiers where upper case is used but lower case is required, or vice versa.

- [ ] Corrected an error in the Number of Sequences field, specifically:
  _____

- [ ] A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

- [ ] Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

- [ ] Other:
  _____
  _____
  _____
  _____

Examiner: The abov corrections must b communicated to th applicant in th first Office Action. DO NOT send a copy of this form.

3/1/95

1600

RAW SEQUENCE LISTING   DATE: 08/14/2002
PATENT APPLICATION: US/09/689,952   TIME: 07:48:38

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\08132002\I689952.raw

```
  5 <110> APPLICANT: PhageTech, Inc.
  9 <120> TITLE OF INVENTION: Compositions and methods involving an essential
Staphylococcus Aureus
 10        gene and its encoded protein
 14 <130> FILE REFERENCE: 21715/1010
 18 <140> CURRENT APPLICATION NUMBER: US 09/689,952
 20 <141> CURRENT FILING DATE: 2000-10-12
 24 <150> PRIOR APPLICATION NUMBER: US 09/470,512
 26 <151> PRIOR FILING DATE: 1999-12-22
 29 <150> PRIOR APPLICATION NUMBER: US 09/470,804
 31 <151> PRIOR FILING DATE: 1999-09-28
 35 <150> PRIOR APPLICATION NUMBER: US 60/110,992
 37 <151> PRIOR FILING DATE: 1998-12-03
 41 <160> NUMBER OF SEQ ID NOS: 19
 45 <170> SOFTWARE: PatentIn version 3.1
 49 <210> SEQ ID NO: 1
 51 <211> LENGTH: 942
 53 <212> TYPE: DNA
 55 <213> ORGANISM: Staphylococcus aureus
 59 <400> SEQUENCE: 1
 60 atgggaggag gacagtcaat aatgaagcaa tttaaaagta taattaacac gtcgcaggac      60
 62 tttgaaaaaa gaatagaaaa gataaaaaaa gaagtaatca atgacccaga tgttaagcaa     120
 64 tttttggaag cgcatcgagc tgaattaacg aatgctatga ttgatgaaga cttaaatgtg     180
 66 ttacaagagt ataaagatca acaaaaacat tatgacggtc ataaatttgc tgattgtcca     240
 68 aatttcgtaa aggggcatgt gcctgagtta tatgttgata ataaccgaat taaaatacgc     300
 70 tatttacaat gcccatgtaa aatcaagtac gacgaagaac gctttgaagc tgagctaatt     360
 72 acatctcatc atatgcaacg agatacttta aatgccaaat tgaaagatat ttatatgaat     420
 74 catcgagacc gtcttgatgt agctatggca gcagatgata tttgtacagc aataactaat     480
 76 ggggaacaag tgaaaggcct ttacctttat ggtccatttg ggacaggtaa atcttttatt     540
 78 ctaggtgcaa ttgcgaatca gctcaaatct aagaaggtac gttcgacaat tatttatttg     600
 80 ccggaattta ttagaacatt aaaaggtggc tttaaagatg gttctttttga aaagaaatta     660
 82 catcgcgtaa gagaagcaaa catttttaatg cttgatgata ttggggctga agaagtgact     720
 84 ccatgggtga gagatgaggt aattggacct ttgctacatt atcgaatggt tcatgaatta     780
 86 ccaacattct ttagttctaa ttttgactat agtgaattgg aacatcattt agcgatgact     840
 88 cgtgatggtg aagagaagac taaagcagca cgtattattg aacgtgtcaa atctttgtca     900
 90 acaccatact ttttatcagg agaaaatttc agaaacaatt ga                       942
 93 <210> SEQ ID NO: 2
 95 <211> LENGTH: 313
 97 <212> TYPE: PRT
 99 <213> ORGANISM: Staphylococcus aureus
103 <400> SEQUENCE: 2
105 Met Gly Gly Gly Gln Ser Ile Met Lys Gln Phe Lys Ser Ile Ile Asn
106 1               5                   10                  15
109 Thr Ser Gln Asp Phe Glu Lys Arg Ile Glu Lys Ile Lys Lys Glu Val
```

```
110          20              25              30
113 Ile Asn Asp Pro Asp Val Lys Gln Phe Leu Glu Ala His Arg Ala Glu
114         35              40              45
117 Leu Thr Asn Ala Met Ile Asp Glu Asp Leu Asn Val Leu Gln Glu Tyr
118       50              55              60
121 Lys Asp Gln Gln Lys His Tyr Asp Gly His Lys Phe Ala Asp Cys Pro
122 65              70              75              80
125 Asn Phe Val Lys Gly His Val Pro Glu Leu Tyr Val Asp Asn Asn Arg
126             85              90              95
129 Ile Lys Ile Arg Tyr Leu Gln Cys Pro Cys Lys Ile Lys Tyr Asp Glu
130         100             105             110
133 Glu Arg Phe Glu Ala Glu Leu Ile Thr Ser His His Met Gln Arg Asp
134         115             120             125
137 Thr Leu Asn Ala Lys Leu Lys Asp Ile Tyr Met Asn His Arg Asp Arg
138       130             135             140
141 Leu Asp Val Ala Met Ala Ala Asp Asp Ile Cys Thr Ala Ile Thr Asn
142 145             150             155             160
145 Gly Glu Gln Val Lys Gly Leu Tyr Leu Tyr Gly Pro Phe Gly Thr Gly
146             165             170             175
149 Lys Ser Phe Ile Leu Gly Ala Ile Ala Asn Gln Leu Lys Ser Lys Lys
150             180             185             190
153 Val Arg Ser Thr Ile Ile Tyr Leu Pro Glu Phe Ile Arg Thr Leu Lys
154         195             200             205
157 Gly Gly Phe Lys Asp Gly Ser Phe Glu Lys Lys Leu His Arg Val Arg
158       210             215             220
161 Glu Ala Asn Ile Leu Met Leu Asp Asp Ile Gly Ala Glu Glu Val Thr
162 225             230             235             240
165 Pro Trp Val Arg Asp Glu Val Ile Gly Pro Leu Leu His Tyr Arg Met
166             245             250             255
169 Val His Glu Leu Pro Thr Phe Phe Ser Ser Asn Phe Asp Tyr Ser Glu
170         260             265             270
173 Leu Glu His His Leu Ala Met Thr Arg Asp Gly Glu Glu Lys Thr Lys
174         275             280             285
177 Ala Ala Arg Ile Ile Glu Arg Val Lys Ser Leu Ser Thr Pro Tyr Phe
178     290             295             300
181 Leu Ser Gly Glu Asn Phe Arg Asn Asn
182 305             310
185 <210> SEQ ID NO: 3
187 <211> LENGTH: 41708
189 <212> TYPE: DNA
191 <213> ORGANISM: Staphylococcus aureus
195 <400> SEQUENCE: 3
196 gatcaaaata cttggggaac ggttagggag taaacttcgc gataattta aaaattcatg     60
198 tataacccccc ctcttataac cattttaagg caggtgatga aatggagatt atagtcgatg   120
200 aaaatttagt gcttaaagaa aaagaaaggc tacaagtatt atataaagac atacctagca    180
202 ataaattaaa agtagttgat ggtttaatta ttcaagcagc aaggctacgt gtaatgcttg   240
204 attacatgtg ggaagacata aaagaaaaag gtgattatga tttatttact caatctgaaa   300
206 aggcgccacc atatgaaagg gaaagaccag tagccaaact atttaatgct agagatgctg    360
208 catatcaaaa aataatcaaa caattatcgg atttattgcc cgaagagaaa gaagacacag   420
```

```
210 aaacgccatc tgatgattac ctatgattag taataaatac gttgatgaat atataaattt   480
212 gtggaaacaa ggaaagataa tttttaaataa agaaagaatt gatctcttta attatctaca   540
214 aaaacatata tattcacgag atgatgtata ttttgatgaa cagaaaatcg aggattgtat   600
216 caaatttatt gaaaaatggt attttccaac attaccattt caaaggttta tcatagctaa   660
218 tatatttctt atagataaaa atacagatga agctttcttt acagaatttg ctattttcat   720
220 gggacgtgga ggcgggaaaa acggtctaat aagtgctatt agtgattttc tttctacgcc   780
222 cttacacgga gttaaagaat atcacatctc cattgttgct aatagtgaag atcaagcaaa   840
224 aacatcgttt gatgaaatca gaaccgtttt aatggataac aaacgaaata agacgggtaa   900
226 aacgccaaaa gctccttatg aagttagtaa agcaaaaata ataaaccgtg caactaaatc   960
228 ggttattcga tataacacat caaacacaaa aaccaaagac ggtggacgtg aggggtgtgt  1020
230 tatttttgat gaaattcatt atttctttgg tcctgaaatg gtaaacgtca aacgtggtgg  1080
232 attaggtaaa aagaaaaata gaagaacgtt ttatataagt actgatggtt ttgttagaga  1140
234 gggttatatc gatgcaatga agcacaaaat tgcaagtgta ttaagtggca aggttaaaaa  1200
236 tagtagattg tttgcttttt attgtaagtt agacgatcca aaagaagttg atgacagaca  1260
238 gacgtgggaa aaggcgaacc caatgttaca taaaccgtta tcagaatacg ctaaaacact  1320
240 gctaagcacg attgaagaag aatataacga tttaccattc aaccgttcaa ataagcccga  1380
242 attcatgact aagcgaatga atttgcctga agttgacctt gaaaaagtaa tagcaccatg  1440
244 gaaagaaata ctagcgacta atagagagat accaaattta gataatcaaa tgtgtattgg  1500
246 tggtttagac tttgcaaaca ttcgagattt tgcaagtgta gggctattat tccgaaaaaa  1560
248 cgatgattac atttggttag gacattcgtt tgtaagacaa gggttttttgg atgatgtcaa  1620
250 attagaacct cctattaaag aatgggaaaa aatgggatta ttgaccattg tcgatgatga  1680
252 tgtcattgaa attgaatata tagttgattg gtttttaaag gctagagaaa aatatgggct  1740
254 tgaaaaagtc atagctgata attatagaac tgatattgta agacgtgcgt ttgaggatgc  1800
256 tggcataaaa cttgaagtac ttagaaatcc aaaagcaata catggattac ttgcaccacg  1860
258 tatcgataca atgtttgcga aacataacgt aatatatgga gacaatcctt tgatgcgttg  1920
260 gtttactaat aatgttgctg taaaaatcaa gccggatgga aataaagagt atatcaaaaa  1980
262 agatgaagtc agacgtaaaa cggatggatt catggctttt gttcacgcat tatatagagc  2040
264 agacgatata gtagacaaag acatgtctaa agcgcttgat gcattaatga gtatagattt  2100
266 ctaatagagg aggtgagaca tgagtattct agaaaagata tttaaaacta ggaaagatat  2160
268 aacatatatg cttgatttag atatgataga agatctatca caacaagcgt atgtgaaacg  2220
270 tttagcgatt gatagttgta ttgaatttgt tgcgcgagct gtcgctcaaa gtcattttaa  2280
272 agtattggaa ggtaatagaa ttcaaaagaa tgatgtttac tacaagttaa atataaaacc  2340
274 aaatactgac ttatcaagcg atagtttttg gcaacaagtt atatataaac taatttatga  2400
276 taacgaggtt ttaatcgtag taagtgacag caaagaatta cttatcgcag atagcttta  2460
278 cagagaagag tacgctttgt atgatgatat attcaaagat gtaacggtta aagattatac  2520
280 ttatcaacgt actttcacaa tgcaagaggt catatattta aagtacaaca acaataaagt  2580
282 gacacacttt gtagaaagtc tattcgaaga ttacgggaaa atattcggaa gaatgatagg  2640
284 tgcacaatta aaaaactatc aaataagagg gattttgaaa tctgcctcta gcgcatatga  2700
286 cgaaaagaat atagaaaaat tacaagcgtt cacaaataaa ttattcaata cttttaataa  2760
288 aaatcaacta gcaatcgcgc ctttgataga aggttttgat tatgaggaat tatctaatgg  2820
290 tggtaagaat agtaacatgc cttttctga attgagtgag ctaatgagag atgcaataaa  2880
292 aaatgttgcg ttgatgattg gtataccctcc aggtttgatt tacggagaaa cagctgattt  2940
294 ggaaaaaaac acgcttgtat ttgagaagtt ctgtttaaca cctttattaa aaaagattca  3000
296 gaacgaatta aacgcgaaac tcataacaca aagcatgtat ttgaaagata caagaataga  3060
298 aattgtcggt gtgaataaaa aagacccact tcaatatgct gaagcaattg acaaacttgt  3120
300 aagttctggt tcatttacaa ggaatgaggt gcggattatg ttaggtgaag aaccatcaga  3180
302 caatcctgaa ttagacgaat acctgattac taaaaactac gaaaaagcta acagtggtga  3240
304 aaatgatgaa aaagaaaaag atgaaaacac tttgaaaggt ggtgatgaag atgaaagcgg  3300
306 agattaaagg cgtcatcgtt ccaacgaag ataaatgggt ttacgaaatg cttggtatgg  3360
```

```
308 attcgacttg tcctaaagat gttttaacac aactagaatt tagtgatgaa gatgttgata 3420
310 ttataattaa ctcaaatggt ggtaacctag tagctggtag tgaaatatat acacatttaa 3480
312 gagctcataa aggcaaagtg aatgttcgta tcacagcaat agcagcaagt gcggcatcgc 3540
314 ttatcgcaat ggctggtgac cacatcgaaa tgagtccggt tgctagaatg atgattcaca 3600
316 atccttcaag tattgcgcaa ggagaagtga aagatctaaa tcatgctgca gaaacattag 3660
318 aacatgttgg tcaaataatg gctgaggcat atgcggttag agctggtaaa aacaaacaag 3720
320 aacttataga aatgatggct aaggaaacgt ggctaaatgc tgatgaagcc attgaacaag 3780
322 gttttgcgga tagtaaaatg tttgaaaacg acaatatgca aattgtagca agcgatacac 3840
324 aagtgttatc gaaagatgta ttaaatcgtg taacagcttt ggtaagtaaa acgccagagg 3900
326 ttaacattga tattgacgca atagcaaata aagtaattga aaaaataaat atgaaagaaa 3960
328 aggaatcaga aatcgatgtt gcagatagta aattatcagc aaatggattt tcaagattcc 4020
330 ttttttaata caaaaatagg aggtcataaa atgactataa atttatcgga aacattcgca 4080
332 aatgcgaaaa acgaatttat taatgcagta aacaacggtg aaccgcaaga aagacaaaat 4140
334 gaattgtacg gtgacatgat taaccaacta tttgaagaaa ctaaattaca agcaaaagca 4200
336 gaagctgaaa gagtttctag tttacctaaa tcagcacaaa ctttgagtgc aaaccaaaga 4260
338 aatttcttta tggatatcaa taagagtgtt ggatataaag aagaaaaact tttaccagaa 4320
340 gaaacaattg atagaatctt cgaagattta acaacgaatc atccattatt agctgactta 4380
342 ggtattaaaa atgctggttt gcgtttgaag ttcttaaaat ccgaaacttc tggcgtggct 4440
344 gtttggggta aaatctatgg tgaaattaaa ggtcaattag atgctgcgtt cagtgaagaa 4500
346 acagcaattc aaaataaatt gacagcgttt gttgttttac caaaagattt aaatgatttt 4560
348 ggtcctgcgt ggattgaaag atttgttcgt gttcaaatcg aagaagcatt tgcagtggcg 4620
350 cttgaaactg cgttcttaaa aggtactggt aaagaccaac cgattggctt aaaccgtcaa 4680
352 gtacaaaaag gtgtatcggt aactgatggt gcttatccag agaaagaaga acaaggtacg 4740
354 cttacatttg ctaatccgcg cgctacggtt aatgaattga cgcaagtgtt taaataccac 4800
356 tcaactaacg agaaaggtaa atcagtagcg gttaaaggta atgtaacaat ggttgttaat 4860
358 ccgtccgatg cttttgaggt tcaagcacag tatacacatt taaatgcaaa tggcgtatat 4920
360 gttactgctt taccatttaa tttgaatgtt attgagtcta cagttcaaga agcaggtaag 4980
362 gtttttaacgt acgttaaagg tctatatgat ggttatttag ctggtggtat taatgttcag 5040
364 aaatttaaag aaacacttgc gttagatgat atggatttat acactgcaaa acaatttgct 5100
366 tacggcaaag cgaaagataa taaagttgct gctgtttgga attagatttt aaaaggacat 5160
368 aaaccagctt tagaagatac cgaagaaaca ctataaaatt ttatgaggtg ataaaatggt 5220
370 gaaatttaaa gttgttagag aatttaaaga catagagcac aatcaacaca agtacaaagt 5280
372 aggggagttg tatccagctg aagggtataa caatcctcgt gttgaattgt tgacaaatca 5340
374 aatcaaaaat aagtacgaca agtttatat cgtacctta gataagctga caaaacaaga 5400
376 attattagaa ctatgcgaat cattacaaaa aaaagcgtct agttcaatgg ttaaaagtga 5460
378 aatcatcgac ttattgaatg gtgaagacaa tgacgattga tgatttgctt gtcaaattta 5520
380 aatcacttga aaagattgac cataattcag aggatgagta cttaaagcag ttgttaaaaa 5580
382 tgtcgtacga gcgtataaaa aatcagtgcg gagtttttga attagagaat ttaataggtc 5640
384 aagaattgat acttatcgc gctagatatg cttatcaaga tttattagaa cacttcaacg 5700
386 acaattacag acctgaaata atagattttt cgttatctct aatggaggta tcagaagatg 5760
388 aagaaagtgt ttaagaaacc tagaattaca actaaacgtt taaatacgcg tgttcatttt 5820
390 tataagtata ctgaaaataa tggtccagaa gctggagaaa aagaagaaaa attattatat 5880
392 agctgttggg cgagtattga tggtgtctgg ttacgtgaat tagaacaagc tatctcaaac 5940
394 ggaacgcaaa atgacattaa attgtatatt cgtgatccgc aaggtgatta tttacccagt 6000
396 gaagaacatt atcttgaaat tgaatcaaga tatttcaaaa atcgtttgaa tataaagcaa 6060
398 gtatcaccag atttggataa taaagacttt attatgattc gcggaggata tagttcatga 6120
400 gtgtgaaagt gacaggtgat aaagcattag aaagagaatt agaaaaacat tttggcataa 6180
402 aagagatggt aaaagttcaa gataaggcgt taatagctgg tgctaaggta attgttgaag 6240
404 aaataaaaaa acaactcaaa ccttcagaag actcaggagc actgattagt gagattggtc 6300
```

```
406 gtactgaacc tgaatggata aaggggaaac gtactgttac aattaggtgg cgtgggcctt  6360
408 ttgaacgatt tagaatagta catttaattg aaaatggtca tgttgagaaa aagtcaggaa  6420
410 aatttgtaaa acctaaagct atgggtggga ttaatagagc aataagacaa gggcaaaata  6480
412 agtattttga gacgctaaaa agggagttga aaaaattgtg attgatattt tgtacaaagt  6540
414 tcatgaagtg attagtcaag acagaattat tagagagcac gtaaatatca ataatattaa  6600
416 gttcaataaa taccctaatg taaaagatac tgatgtacct tttattgtta ttgacgatat  6660
418 cgacgaccca atacctacaa cttatactga cggagatgag tgtgcatata gttatattgt  6720
420 ccaaatagat gtttttgtta agtacaatga tgaatataat gcgagaatca taagaaataa  6780
422 gatatctaat cgcattcaaa agttattatg gtctgaacta aaaatgggaa atgtttcaaa  6840
424 tggaaaaccg gaatatatag aagaatttaa aacatataga agctctcgcg tttacgaggg  6900
426 cattttttat aaggaggaaa attaaatggc agtaaaacat gcaagtgcgc caaaggcgta  6960
428 tattaacatt actggtttag gtttcgctaa attaacgaaa gaaggcgcgg aattaaaata  7020
430 tagtgatatt acaaaaacaa gaggattaca aaaaattggt gttgaaactg gtggagaact  7080
432 aaaaacagct tatgctgatg gcggtccaat tgaatcaggg aatacagacg gagaaggtaa  7140
434 aatctcatta caaatgcatg cgttccctaa agagattcgc aaaattgttt ttaatgaaga  7200
436 ttatgatgaa gatggcgttt acgaagagaa acaaggtaaa caaaacaatt acgtagctgt  7260
438 atggttcaga caagagcgta aagacggtac atttagaaca gtttttattac ctaaagttat  7320
440 gtttacaaat cctaaaatcg atggagaaac ggctgagaaa gattgggatt tctcaagtga  7380
442 agaggttgaa ggtgaggcac ttttcccttt agttgataat aaaaagtcag tacgtaagta  7440
444 tatctttgat tcagctaaca tgacaaatca tgatggagac ggtgaaaaag gcgaagaggc  7500
446 tttcttaaag aaaatttttag gcgaagaata tactggaaac gtgacagagg gtaacgaaga  7560
448 aactttgtaa caaaaccggc ttcatcggaa actgcggtaa agtcggttaa tataccagat  7620
450 agcattaaaa cacttaaagt tggcgacaca tacgatttaa atgttgtagt agagccatct  7680
452 aatcaaagta agttattgaa atacacaaca gatcaaacga atattgtatc aatcaatagt  7740
454 gatggtcaag ttactgcgga agcacaaggc attgctacgg ttaaagcaac agttggtaat  7800
456 atgagtgaca ctataacaat aaatgtagaa gcataagagg gggcaacccc tctattttat  7860
458 ttgaaaataa ggagagtatt ataaaatggc aaaattaaaa cgtaacatta ttcaattagt  7920
460 agaagatcca aaagcaaatg aaattaaatt acaaacgtac ttaacaccac acttcatttc  7980
462 atttgaaatt gtatacgaag caatggattt aatcgatgat attgaggacg aaaatagcac  8040
464 gatgaagcca agagaaatcg ctgacagatt gatggatatg gttgtaaaaa tttacgataa  8100
466 ccaattcaca gttaaagacc taaaagaacg tatgcatgca cctgatggaa tgaatgcact  8160
468 tcgtgaacaa gtgattttca ttactcaagg tcaacaaact gaggaaacta gaaatttat  8220
470 ccagaacatg aaataaagcc tgaagattta acatataaag caatgttgaa aaatatggat  8280
472 actctcatga tggacttaat tgaaaatggt aaagacgcta acgaagtttt aaaaatgcca  8340
474 tttcattatg tgctttccat atatcaaaat aaaaataatg acatttctga agaaaaagca  8400
476 gaggctttaa ttgatgcatt ttaaccttaa ccgtttggtt agggttattt ttttgaactt  8460
478 ttttagaaag gaggtaaaaa atgggagaaa gaataaaagg tttatctata ggtttggatt  8520
480 tagatgcagc aaatttaaat agatcatttg cagaaatcaa acgaaacttt aaaactttaa  8580
482 attctgactt aaaattaaca ggcaacaact tcaaatatac cgaaaaatca actgatagtt  8640
484 acaaacaaag gattaaagaa cttgatggaa ctatcacagg ttataagaaa aacgttgatg  8700
486 atttagccaa gcaatatgac aaggtatctc aagaacaggg cgaaaacagt gcagaagctc  8760
488 aaaagttacg acaagaatat aacaaacaag caaatgagct gaattatta gaaagagaat  8820
490 tacaaaaaac atcagccgaa tttgaagagt tcaaaaaagc tcaagttgaa gctcaaagaa  8880
492 tggcagaaag tggctgggga aaaaccagta agtttttga agtatggga cctaaattaa  8940
494 caaaatgggg tgatggtttta aaatccattg gtaaaggttt gatgattggt gtaactgcac  9000
496 ctgttttagg tattgcagca gcatcaggaa aagcttttgc agaagttgat aaaggtttag  9060
498 atactgttac tcaagcaaca ggcgcaacag gcagtgaatt aaaaaaattg cagaactcat  9120
500 ttaaagatgt ttatggcaat tttccagcag atgctgaaac tgttggtgga gtttttaggag  9180
502 aagttaatac aaggttaggt tttacaggta aagaacttga aaatgccaca gagtcattct  9240
```

VERIFICATION SUMMARY   DATE: 08/14/2002
PATENT APPLICATION: US/09/689,952   TIME: 07:48:39

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\08132002\I689952.raw